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FIRST NAMED INVENTOR APPLICATION NO. FILING DATE ATTORNEY DOCKET NO. CONFIRMATION NO. 09/891,900 06/26/2001 Kai H. Chang 2-8-23 2416 **EXAMINER** 7590 02/04/2005 Michael A. Morra HOFFMANN, JOHN M Suite 2H-02 ART UNIT PAPER NUMBER 2000 Northeast Expressway Norcross, GA 30071 1731

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/891,900	. CHANG ET AL.
Office Action Summary	Examiner	Art Unit
	John Hoffmann	1731
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
<ul> <li>1) Responsive to communication(s) filed on <u>03 January 2005</u>.</li> <li>2a) This action is FINAL.</li> <li>2b) This action is non-final.</li> <li>3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213.</li> </ul>		
Disposition of Claims		
4)  Claim(s) 1-20 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-20 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
10) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>		
Attachment(s)		
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)     Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa	

Application/Control Number: 09/891,900

Art Unit: 1731

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

From MPEP 2173.05(h):

Alternative expressions are permitted if they present no uncertainty or ambiguity with respect to the question of scope or clarity of the claims. One acceptable form of alternative expression, which is commonly referred to as a Markush group, recites members as being "selected from the group consisting of A, B and C." See Ex parte Markush, 1925 C.D. 126 (Comm'r Pat. 1925).

Presently, claim 1, step b has a group which is very similar to the above accepted form, but there is no indication that the group is "consisting of" the members. Therefore it is impossible for anyone to tell if applicant's group is open or closed to additional members - and thus the claim presents uncertainty or ambiguity with respect to the question of scope of the claim. If the above "acceptable form" is not desirable for Applicant, Examiner can be telephoned for other expressions.

Such language in any of the other claims also presents uncertainty or ambiguity with respect to the question of scope of the any of the other claims.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 1-20 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the reply filed 3 January 2005. In that paper, applicant has stated "applicants adjust the partial pressure of oxygen during the dehydration process (independent claims 1 and 16)", and this statement indicates that the invention is different from what is defined in the claim(s) because the claims do not require any adjusting during the dehydration. It is clear that the adjusting occurs **after** (*not* "during") the dehydrating consolidating, exposing and measuring. In fact, from Applicant's figures 3A and 3B, the adjusting would occur 4 days after the dehydration.

### Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-5 and 7-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blankenship 5059229 in view of Powers 4165223.

Step (a) see figure 7 of Blankenship.

Step (b): see col. 7, lines 24-27. However there is no discussion of oxygen.

Powers at col. 3, lines 44-56 and cols. 7 and 8 disclose that using oxygen in the drying atmosphere will help to reduce the removal of germanium oxide. It would have been obvious to add oxygen in the Blankenship drying so as to prevent removal of germanium oxide.

Step c): see col. 7, lines 29-31.

Step D): see col. 8, lines 6-13.

Step E): see col. 8, lines 14-19 and 47.

Step F): see col. 8, lines 38-65 – it is inherent or obvious that these losses were measured.

Step G) Powers discloses that oxygen is result effective variable. It would have been obvious to perform routine experimentation to determine the optimal oxygen level. This would require altering the oxygen flow used. The intention "to reduce the transmission loss" is an intention that does not result in a manipulative difference. As per col. 8, lines 39-41 of Powers, loss is a feature that it would have been obvious to monitor to determine if too much oxygen is being used.

Step H): it would have been obvious to repeat the process as many times as desired – depending upon how much fiber is desired.

Step G can be met in an alternative way. First, it would have been obvious to shut off all glass flows when the process is over, and then start the flows again once the process is repeated. Each time the pressure would be adjusted up or down. Once the artisan determines the optimal process variables, all of the start-up and shut-down adjusting of the pressure would be based on the previous measured transmission loss. All of the processing is being done to reduce the transmission loss as compared to the loss one would likely achieve without the control of hydrogen an oxygen.

Claims 2-5: see the paragraph bridging cols. 7-8, Blankenship. Claim 3 it would have been obvious to control the oxygen in all phases of the process to prevent the loss of Germania

Claim 7: See col. 8, lines 60-65, Blankenship. 79 hours is approximately 4 days.

Claims 8-15 are either clearly met – or are met because they are substantially the same as the claims above.

Claim 16 It would have been obvious to have the losses as low as possible and to have as low as change in loss as possible because loss is a bad thing. It is noted that if Applicant presents any evidence or argument that one of ordinary skill would not know how to get the claimed loss level, then it is likely that such evidence or argument might be used in an non-enablement or scope of enablement rejection. Presently it is deemed that the invention is fully enabled and one of ordinary skill would know how to get the loss levels presently claimed.

Claims 17-20 are similarly met.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blankenship 5059229 and Powers as applied to claim 1 above, and further in view of Fleming 5364427.

Blankenship teaches the invention except for the overclad tube. It is well known to save time and money by applying cladding via an overclad tube – as opposed to other methods of forming a cladding. It would have been obvious to produce the Blankenship preform by using a cladding tube to provide the outer layer so as to reduce the cost. Fleming is cited as evidence that there is "significant cost saving" by using an overcladding tube (see Fleming col. 1, lines 13-33).

#### Response to Arguments

Applicant's arguments filed 3 January 2005 have been fully considered but they are not persuasive.

It is argued that the alternative expression used in the claims is not meant to be a Markush group and then alleges the claim language is sufficiently clear. The allegation is of the claim being clear is not sufficient – at least because it still gives no indication as to what is meant by the claimed language. Specifically the arguments do not address the basis of the rejection: that the language presents uncertainty or ambiguity with respect to the question of scope of the claim. More specifically the arguments do not concern that one of ordinary skill would not be able to tell if the group is opened or closed to other members.

See Allen Eng'g Corp. V. Bartell Indus. Inc. 299 F 3d 1336, 1348, 63 USPQ2d 1769, 1775 (Fed. Cir. 2002) (quoting Personalized Media Communications, LLC v. Int'l Trade Comm'n, 161 F.3d 696, 705, 48 USPQ2d 1880, 1888 (Fed. Cir. 1998)) ("In determining whether the claim is sufficiently definite, we must analyze whether "one skilled in the art would understand the bounds of the claim when read in light of the specification.") See also, Exxon Research & Eng'g Co. v. United States, 265 F.3d 1371, 1375, 60 USPQ2d 1272, 1276 (Fed. Cir. 2001) (citation omitted) (patent claims must be "sufficiently precise to permit a potential competitor to determine whether or not he is infringing").

The arguments regarding the prior art not disclosing adjusting the partial pressure during the dehydration process or "during various steps" is noted. The

relevance of this is not understood. As indicated in the above 112 rejection, Examiner does not see such a limitation in the claims. Therefore it does not appear relevant whether the prior art acknowledges the (unclaimed) limitations.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

/Johrl/H¢ffmann

Primary Examiner

Art Unit 1731

jmh